



State of Montana

Montana School for the Deaf and Blind

Agency IT Plan

Fiscal Year 2012-2017

May 2012

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EXECUTIVE SUMMARY

The Montana School for the Deaf and the Blind (MSDB) is charged by statute with the responsibility to provide educational services to Montana's sensory impaired children. The school accomplishes this mission through the provision of educational services at its campus in Great Falls. Residential facilities at the schools' campus provide accommodations for students attending the MSDB from outside of Great Falls.

Pursuant to statute, the MSDB also provides consultation services through its Outreach Program to local school districts that have sensory impaired children enrolled. Additionally, the school is charged with tracking students from the time of impairment identification through the child's exit from intervention or educational services.

School programs are authorized under Title 20, Chapter 8, Part 1 of Montana Code Annotated found at the following link: http://data.opi.mt.gov/bills/MCA_toc/20_8_1.htm

This summary provides details on the schools' current technology plan, future technology initiatives, and current funding.

Current Technology Plan

This technology plan supports the schools' mission and 5-year school improvement plan through:

- Making available to students current technology in support of each student's educational and life skill needs. Technology is integrated into the schools' curriculum and is adapted to meet individual student needs as identified in their Individualized Education Plan (IEP). Refer to future technology initiatives below.
- Maintaining distance learning circuit (ITV) to provide distance learning opportunities to students; professional development activities for staff and for stakeholders serving sensory impaired students; video streaming; "virtual classroom" tours for students; and teleconferencing opportunities for students and staff. The distance learning circuit is currently provided by VisionNet, Inc.
- Maintaining connectivity to the Department of Public Health and Human Services' Child Health Referral Information System (CHRIS) to track students identified with a sensory impairment through the child's exit from intervention or educational services. The DPHHS made modifications to this database to allow MSDB to input data and extract reports.
- Maintaining connectivity to SummitNet to provide educational resources to students and professional resources to staff.
- Maintaining connectivity to Citrix, and SABHRS and HR Modules for business processing.
- Providing up-to-date technology on short-term loans to school districts that have visually impaired students enrolled. This lending library was enacted by the 2007 legislature and is intended to allow districts to evaluate equipment items to see if it meets student needs prior to making a purchase. Refer to future technology initiatives below.
- Maintaining connectivity to the Great Falls Public Library to allow on-line access to the MSDB library resources. Students, parents and other stakeholders can access and checkout books and other resources via this on-line service.
- Maintaining connectivity to the Office of Public Instructions' (OPI) AIM database for student record keeping, and to OPI's E-Grant system for processing federal grants.
- Maintaining connectivity to the Office of Public Instructions' school food database for processing meal applications and reimbursements.
- Maintaining/updating telecommunications equipment in support of the schools' educational and business needs.

Future Technology Initiatives

Current and future technology initiatives include:

- Using Apple i-Pad technology with students that have high instructional needs. This initiative is funded from a federal Part B grant through the Office of Public Instruction.
- Expanding distance learning opportunities for students served by the school.
- Expanding “virtual classroom” and social opportunities for students through video conferencing.
- Expanding professional development opportunities for staff and provision of instructional support to school districts through video conferencing.
- Updating equipment in the schools’ lending library. Some of the equipment in this lending program to school districts is out-of-date and needs to be replaced. The school will be submitting a New Proposal (NP) with the 2015 biennium budget to replace/update equipment. The school will request \$25,000 (OTO) in fiscal year 2014.
- Updating computer technology/software school-wide to maintain the schools’ 5-year replacement cycle for technology. The school will be requesting \$25,000 in each year of the 2015 biennium to maintain this replacement cycle.

Funding

The school submits an E-Rate application each year for funding of the schools’ internet connectivity and for the schools’ distance learning circuit. Currently, the Department of Administration, Information Technology Services Division is the schools’ internet provider, and VisionNet, Inc. is the provider of the schools’ distance learning circuit and hosts video conferencing. In fiscal year 2012, seventy percent of the cost of internet and the distance learning circuit are funded from the E-Rate Program. In fiscal year 2013, the percentage funded from the E-Rate Program increases to 80 percent. The balance of funding for these services is funded from the schools’ budget.

The Universal Service Administration Corporation (USAC) administers funding for the E-Rate Program and pays vendors directly for the services provided to schools. For MSDB, the USAC pays the discounted portion (70% in FY12 and 80% in FY13) directly to the Information Technology Services Division (ITSD) and to VisionNet. Therefore, the cost table in this IT plan does not list the costs paid by USAC to ITSD and VisionNet. The table only lists costs paid from the schools’ budget. All costs listed in the table are paid from the schools’ general fund budget.

SECTION 1: AGENCY ADMINISTRATIVE INFORMATION

Role: Plan Owner

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IT Inventory

The IT inventory database located at <http://mine.mt.gov/enterpriseitinventory> was or will be updated on May 1, 2012. As required by MCA 2-17-524(3)(c) the plan will be updated by June 30th, 2012.

SECTION 2: AGENCY IT MISSION

The Montana School for the Deaf and the Blind's IT mission is that Information Technology will aid the agency in achieving goals set forth in its Strategic and School Improvement plans in an efficient and secure manner; that staff will be able to utilize technology as a teaching and learning tool; and that the students we serve will be technology literate and be able to use technology for learning, communicating and living and working as independently as possible.

SECTION 3: AGENCY REQUIRED PROGRAMS

Information Security Management (ISM) Program General Description

The Montana School for the Deaf and Blind has implemented a department-wide (agency) information security management program compliant with §2-15-114, MCA and State Information Technology Systems Division *Information Security Programs* policy with adoption of the National Institute of Standards and Technology (NIST) Special Publication 800 series as guides for establishing appropriate security procedures. This is in alignment with the State of Information Technology Service's direction for an enterprise approach to protect sensitive and critical information being housed and shared on State and/or external/commercial information assets or systems.

As described in NIST SP 800-39, the agency has developed and adopted the Information Risk Management Strategy to guide the agency through information security lifecycle architecture with application of risk management. This structure provides a programmatic approach to reducing the level of risk to an acceptable level, while ensuring legal and regulatory mandates are met in accordance with MCA §2-15-114.

The agency's program has four components, which interact with each other in a continuous improvement cycle. They are as follows:

- Risk Frame – Establishes the context for making risk-based decisions
- Risk Assessment – Addresses how the agency will assess risk within the context of the risk frame; identifying threats, harm, impact, vulnerabilities and likelihood of occurrence
- Risk Response – Addresses how the agency responds to risk once the level of risk is determined based on the results of the risk assessment; e.g., avoid, mitigate, accept risk, share or transfer
- Risk Monitoring – Addresses how the agency monitors risk over time; "Are we achieving desired outcomes?"

The agency's information security management program is challenged with limited resources; manpower and funding. While alternatives are reviewed and mitigation efforts are implemented the level of acceptable risk is constantly challenged by the ever changing technology and associated risks from growing attacks and social structure changes. Specific vulnerabilities have been identified which require restructure, new equipment, or personnel positions (funds increase), and are addressed below in our future plans.

Future Security Program Plans

MSDB will continue to develop our security plans as technology and threats evolve.

Continuity of Operations (COOP) Capability Program General Description

MSDB hopes to join with the Department of Administration *Continuity Services* for the development of our agency's Continuity of Operations Capabilities, which will provide the plans and structure to facilitate response and recovery capabilities to ensure the continued performance of the State Essential Functions of Government. This program involves two Blocks of focus; the first is to complete the Business Continuity Plans (BCP) involving two phases, the second Block works on the specific business processes or activity plans such as Emergency Action Plans (EAP), Information System Contingency Plan (ISCP), Communications Plans, Incident Management Plans, and more. We have not yet completed a BCP, but hope to by July 2013. This program is not a standalone process in that information which is identified and recorded under this structure can and often exists in the Records Management Program and associates with Information Security Management Program requirements.

Integration of these three programs is critical to the confidentiality, integrity, and availability of information, which is associated with each program. >

Future COOP Program Plans

We hope to work with the Department of Administration to develop our COOP plans.

SECTION 4: AGENCY IT PLAN – GOALS & OBJECTIVES

Goal Number 1:

IT Goal 1 Maintain technology to ensure services remain secure and current.

Description: Keep connectivity to SummitNet in order to access online resources and services, maintain ITV circuit and services, maintain equipment and telecommunications, update software including security and filter software, maintain equipment rotation schedule and keep short-term lending library up-to-date.

Benefits: What benefits are realized and who realizes the benefits? Reduced cost, improved employee and program efficiencies, staff & students have access to current information and resources, LEA and other agencies serving sensory impaired students across Montana will have greater access to the specialists at our school. Staff, students, families, LEA/agencies serving sensory impaired students, and constituents.

Which state strategic goal(s) and/or objective(s) does your goal address? Goals # 3 and 4--This goal supports the State's goal of developing IT resources in an organized, deliberative, and cost-effective manner and by protecting individual privacy and the privacy of information contained within IT systems

Supporting Objective/Action

Objective 1-1 Maintain Internet connectivity to access SABHRS Financials and state H.R. resources, AIM student information system, CHRIS data system on students served by MSDB, OPI, NWEA Measures of Academic Performance assessment site and tools, Library resources, Educational online resources for students and staff, and VPN connections for Outreach and other tele-workers that have high speed capabilities.

Describe the business requirements or business problem driving this objective. As a state agency we are required to go through SABHRS. CHRIS helps meet statutory requirement 20-8-102 (responsible for tracking sensory impaired students from birth until exiting services). Our school improvement goals are tied to the NWEA testing data. AIM is our student information system as well as our Special Education Records System. We are required by OPI to use this system for accreditation and other reporting areas. Outreach staff and other tele-workers need to be able to connect to our servers. This objective meets needs stated in our Strategic Plan and supports our School Improvement Plan.

Describe the benefits to be derived from the successful completion of this objective. Being able to track students and allowing our Outreach to interpret what their educational needs will be and how they are being met. Students will be able to complete online testing required by our school improvement plan. Our library will be able to provide current resources. OPI will have an accurate accounting of our student data. Tele-workers will be able to connect and communicate with others at the school. Strategic Plan objective and School Improvement goals can be met.

Describe the anticipated risks associated with this objective. (e.g., risks associated with inaction or not completing this objective; risks associated with completing this objective). We would not be in compliance with state requirements (tracking assets, student management, special education, managing sensory-impaired databases, etc.). We would not be able to accommodate off-site workers, students would have a lack of resources and services, we would have to revert back to paper and pencil standardized testing.

What is the timeframe for completion of this objective? On going.

Describe the critical success factors associated with this objective; i.e., how will you know when it has been successfully completed? We have continued access to online/off-site resources and others have access to us.

Supporting Objective/Action

Objective 1-2 Maintain connectivity on the ITV circuit and on-going services to provide distant learning activities for sensory-impaired students, professional development opportunities for MSDB staff, Local Educational Agencies (LEAs), and other agencies providing services to sensory-impaired students, support to parents and families of sensory impaired children, avenues of collaboration and interaction between other schools and programs for sensory impaired students, support business meetings where appropriate, and conference in tele-workers and Outreach staff.

Describe the business requirements or business problem driving this objective. We needed to be able to visually connect with local LEAs and other agencies in order to support their work with sensory-impaired students; support families in communicating with the children as well as provide support and learning opportunities for them; provide students with a broader educational activities; provide teachers with opportunities to collaborate and learn from other professionals in their field of expertise; as well as provide an avenue to conduct meetings with off-site personnel and constituents. This objective meets needs stated in our Strategic Plan and supports our School Improvement Plan

Describe the benefits to be derived from the successful completion of this objective. Broaden knowledge and expertise of all involved (professional opportunities); provide students with access to other sensory impaired students, cultural awareness, and successful deaf/Hard of Hearing or Visually Impaired role models; students will participate in interactive and/or distant learning activities that will expand their understanding of the world and build identity as a sensory-impaired individual; save money on having tele-meetings. Strategic Plan objective and School Improvement goals can be met.

Describe the anticipated risks associated with this objective. (e.g., risks associated with inaction or not completing this objective; risks associated with completing this objective). Lack of ability to provide professional development in sensory specific teaching skills and strategies; students will not be able to have a broader understanding of the world around them and a firsthand knowledge of the scope of opportunities that they can access; LEAs and others would still have limited access to services on our campus; we would not be able to accommodate off-site workers and Outreach staff would still need to drive to Great Falls from across the state to attend meetings.

What is the timeframe for completion of this objective? On-going.

Describe the critical success factors associated with this objective; i.e., how will you know when it has been successfully completed? The ITV circuit/services are being used to connect to LEAs and others, students are participating in virtual field trips, conferences with other sensory impaired students, having access to distance learning activities; staff can attend meeting s via tele-conferencing.

Supporting Objective/Action

Objective 1-3 Maintain equipment functionality, rotation schedule, telecommunication system, software upgrades as well as keep the MSDB Technology Lending Library up-to-date.

Describe the business requirements or business problem driving this objective. Avoid obsolesce in equipment; being able to deliver reliable services with fidelity; keeping security and accessible software current with system and user needs; being able to provide current technology to LEAs for trial/demo purposes so that try it to see if it works before they purchase. This objective meets needs stated in our Strategic Plan and supports our School Improvement Plan.

Describe the benefits to be derived from the successful completion of this objective. An efficient working IT infrastructure; current VI technology available for checkout. Strategic Plan objective and School Improvement goals can be met.

Describe the anticipated risks associated with this objective. (e.g., risks associated with inaction or not completing this objective; risks associated with completing this objective). Breakdown in communication, services will not be delivered, inefficiency with the use of older equipment; LEAs would not be able to make sure a piece of equipment worked for a student until purchasing

What is the timeframe for completion of this objective? On-going

Describe the critical success factors associated with this objective; i.e., how will you know when it has been successfully completed? IT infrastructure is efficient and working.

Supporting Objective/Action

Objective 1-4 Maintain a dynamic website with links to and resources about sensory impaired children and working with them.

Describe the business requirements or business problem driving this objective. We are required to have policies and certain plans posted so that they can be accessed online. We also need to provide information for parents, students, LEAs, and other constituents about our program. This objective meets needs stated in our Strategic Plan and supports our School Improvement Plan.

Describe the benefits to be derived from the successful completion of this objective. Individuals across the world can learn about our school and the services we provide. State government and others can access our policies and plans. Strategic Plan objective and School Improvement goals can be met.

Describe the anticipated risks associated with this objective. (e.g., risks associated with inaction or not completing this objective; risks associated with completing this objective). We wouldn't be in compliance; we would be fielding a lot more phone calls.

What is the timeframe for completion of this objective? On-going

Describe the critical success factors associated with this objective; i.e., how will you know when it has been successfully completed? The website is up and dynamic.

Goal Number 2:

IT Goal 2 Students will access and utilize technology for communication, learning, and life.

Description: Students will use technology to communicate with each other, their families, friends, teachers, etc. They will build skills with basic desktop applications and tools. They will learn skills that can be applied in a work environment. They will learn to be safe on the Internet. Students needing accessible tools to access technology will learn such tools so that they will have equal access.

Benefits: What benefits are realized and who realizes the benefits? Students learn skills that will enable them to be independent and contributing members of society. Strategic Plan objective and School Improvement goals can be met.

Which state strategic goal(s) and/or objective(s) does your goal address? Goal # 3 (Improve the quality of life of Montana citizens).

Supporting Objective/Action

Objective 2-1 Students will learn and apply technology related skills including learning and using accessible software/hardware to complete educational tasks and projects. Students' skills shall be tracked using GTCC technology curriculum reports.

Describe the business requirements or business problem driving this objective. Montana has state standards for technology. In order to be prepared for life and work after K-12 schooling, students need to be proficient with technology. This objective meets needs stated in our Strategic Plan and supports our School Improvement Plan.

Describe the benefits to be derived from the successful completion of this objective. Students are knowledgeable and able to complete educational and/or job related tasks. Students have skills that lead to employment and thus contribute to society. Learning and using accessible hardware and software not only

that which allows them to use the computer system but also to see better (magnifiers, notetakers, etc.) and communicate (TTY, VP, etc.) will allow sensory impaired students an equal footing with their non-disabled peers. Using ITV will allow students to expand their knowledge of the world and build their identity as a sensory impaired individual. Strategic Plan objective and School Improvement goals can be met.

Describe the anticipated risks associated with this objective. (e.g., risks associated with inaction or not completing this objective; risks associated with completing this objective). We would not meet the requirements for student technology achievement; students would not be able to complete educational activities that required technology skill; students may not have basic technology skills needed for work.

What is the timeframe for completion of this objective? On-going

Describe the critical success factors associated with this objective; i.e., how will you know when it has been successfully completed? Students pass technology assessment at a proficient level. Students are able to compete with non-disabled peers for jobs.

Goal Number 3:

IT Goal 3 Staff will use technology efficiently and effectively within their job assignments.

Description: Staff will be able to use technology to communicate, to build and deliver lessons, participate in professional development, reporting and maintaining student records (AIM system), create brochures and handouts that communicate the services at MSDB.

Benefits: What benefits are realized and who realizes the benefits? Staff, students, parents/families, constituents, citizens of Montana

Which state strategic goal(s) and/or objective(s) does your goal address? Goal #5 – Improving our staff's skills will improve our ability to provide our service – education to deaf/hard of hearing and visually impaired students as well as being a resource to families, LEAs and other constituents.

Supporting Objective/Action

Objective 3-1 Teachers will integrate current and emerging technology (including ITV) into their lessons and participate in technology related professional development activities as demonstrated in lesson plans and in-service attendance and/or feedback forms.

Describe the business requirements or business problem driving this objective. Best practices. Cost of keeping curricular materials current can be expensive. Need to prepare students for continued education and life. This objective meets needs stated in our Strategic Plan and supports our School Improvement Plan.

Describe the benefits to be derived from the successful completion of this objective. Having teachers proficient in technology skills enables us to prepare our students for the 21st century. Current information is quickly found on the internet and this allows us to design lessons and follow curricular guidelines without needing to purchase text based series as frequently as before. Strategic Plan objective and School Improvement goals can be met.

Describe the anticipated risks associated with this objective. (e.g., risks associated with inaction or not completing this objective; risks associated with completing this objective). Students may have a limited idea/vision of how technology can be utilized in a creative, effective and integrated manner. Students may not have opportunities to use technology in a collaborative way to learn how to solve problems and address areas of need.

What is the timeframe for completion of this objective? On-going

Describe the critical success factors associated with this objective; i.e., how will you know when it has been successfully completed? Teachers are utilizing technology in their educational practices and

encouraging students to do the same.

Supporting Objective/Action

Objective 3-2 Staff will use utilize technology to facilitate communication, maintain data, and participate in and/or provide professional development opportunities for families, LEAs, and other agencies working with sensory impaired students.

Describe the business requirements or business problem driving this objective. Staff must communicate with each other as well as with students, families and constituents. Staff are required to enter current data into CHRIS, AIM and other databases. Staff need to participate in professional development opportunities in order to maintain licensure and certificates. LEAs and other agencies serving sensory impaired students across the state look to MSDB for support and expertise. Strategic Plan objective and School Improvement goals can be met. This objective meets needs stated in our Strategic Plan and supports our School Improvement Plan.

Describe the benefits to be derived from the successful completion of this objective. Current information on sensory impaired children and students in Montana will be available. Instantaneous communication can be delivered so that needs are quickly addressed. Professional development opportunities are available for our staff to build their skills. MSDB can provide professional development opportunities for others serving sensory impaired students across the state. Teachers can prepare and store special education reports online for easy access. Strategic Plan objective and School Improvement goals can be met.

Describe the anticipated risks associated with this objective. (e.g., risks associated with inaction or not completing this objective; risks associated with completing this objective). Communication is slow – breakdowns may occur; data becomes old and non-informative when trying to analyze for needs/goal development; special education process goes back to paper/pencil. We cannot support or provide training for LEAs and others as quickly and efficiently. Our pool of professional development opportunities for staff shrinks.

What is the timeframe for completion of this objective? On-going

Describe the critical success factors associated with this objective; i.e., how will you know when it has been successfully completed? Email, ITV, and the tele-communication system are being used. AIM is up and running and files/information therein is up to date. Staff is able to access online/distance learning professional development opportunities. MSDB is delivering professional development opportunities to others.

SECTION 5: IT INITIATIVES (FY2012 – FY 2017)

Initiative 1 No new initiatives at this time.

Description:

EPP Number (if applicable)

Initiative 2

Description:

EPP Number (if applicable)

Initiative 3

Description:

EPP Number (if applicable)

Initiative 4

Description:

EPP Number (if applicable)

Initiative 5

Description:

EPP Number (if applicable)

SECTION 6: ENTERPRISE ALIGNMENT

Communities of Interest Participation

- ☐ Government Services
- ☐ Public Safety
- ☐ Human Resources
- ☐ Environmental
- ☒ Education
- ☐ Economic
- ☐ Cultural Affairs
- ☐ Finance

SECTION 7: PLANNED AGENCY IT EXPENDITURES

<u>Expense Category</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>
Personal Services	\$55,245.00	\$55,245.00	\$56,339.00	\$58,074.00	\$59,553.00	\$61,075.00
Operating Expenses	\$15,693.00	\$15,693.00	\$15,693.00	\$15,693.00	\$15,693.00	\$15,693.00
Initiatives *	\$12,998.00	\$3,000.00	\$50,000.00	\$25,000.00	\$25,000.00	\$25,000.00
Other expenditures **			\$13,000.00			
Totals	\$83,936.00	\$73,938.00	\$135,332.00	\$98,767.00	\$100,246.00	\$101,768.00

***FY12:** \$12998 for Ipad's paid for from IDEA Part B funds

FY13: \$3000 for Ipad's paid for from IDEA Part B funds

FY14: \$25,000 for Lending Library (One-Time-Only funding); \$25,000 for tech rotation

FY15: \$25,000 for tech rotation

FY16: \$25,000 for tech rotation

FY17: \$25,000 for tech rotation

****FY14:** \$10,000 for upgrade of Microsoft Office Suite; \$3000 for server/software upgrade

SECTION 8: ADDITIONAL INFORMATION - OPTIONAL

Other types of information that support the agency's IT Plan. Some examples might include other COI participation, reference to other IT plans such as GIS plan, eGovernment plan, security plan, staffing issues and constraints, etc.